

Title (en)  
Dynamic granule-based intermediate storage

Title (de)  
Dynamische granulatbasierte Zwischenspeicherung

Title (fr)  
Stockage intermédiaire à base de granule dynamique

Publication  
**EP 2778891 A1 20140917 (EN)**

Application  
**EP 14160349 A 20140317**

Priority  
US 201313839595 A 20130315

Abstract (en)  
A data storage system includes data storage and random access memory. A sorting module is communicatively coupled to the random access memory and sorts data blocks of write data received in the random access memory of the data storage. A storage controller is communicatively coupled to the random access memory and the data storage and being configured to write the sorted data blocks into one or more individually-sorted granules in a granule storage area of the data storage, wherein each granule is dynamically constrained to a subset of logical block addresses. A method and processor-implemented process provide for sorting data blocks of write data received in random access memory of data storage. The method and processor-implemented process write the sorted data blocks into one or more individually- sorted granules in a granule storage area of the data storage, wherein each granule is dynamically constrained to a subset of logical block addresses.

IPC 8 full level  
**G06F 3/06** (2006.01); **G06F 12/08** (2006.01); **G11B 20/10** (2006.01)

CPC (source: EP KR US)  
**G06F 3/061** (2013.01 - US); **G06F 3/0613** (2013.01 - EP US); **G06F 3/064** (2013.01 - US); **G06F 3/0659** (2013.01 - EP US);  
**G06F 3/0665** (2013.01 - US); **G06F 3/0676** (2013.01 - EP US); **G06F 12/02** (2013.01 - KR); **G11C 7/1012** (2013.01 - US);  
**G11C 7/1072** (2013.01 - US)

Citation (search report)  
• [XII] US 2011004724 A1 20110106 - JO MYUNG-HYUN [KR], et al  
• [I] US 2013038960 A1 20130214 - SONG JAE IK [KR]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2778891 A1 20140917**; CN 104049908 A 20140917; CN 104049908 B 20180731; JP 2014182823 A 20140929; JP 5941489 B2 20160629;  
KR 101910840 B1 20181219; KR 20140113353 A 20140924; KR 20160086299 A 20160719; US 2014281186 A1 20140918;  
US 2014281194 A1 20140918; US 2016283115 A1 20160929; US 9384793 B2 20160705; US 9740406 B2 20170822

DOCDB simple family (application)  
**EP 14160349 A 20140317**; CN 201410093915 A 20140314; JP 2014050342 A 20140313; KR 20140024425 A 20140228;  
KR 20160084281 A 20160704; US 201313839595 A 20130315; US 201313973491 A 20130822; US 201615177022 A 20160608